

CLAIMS

What is Claimed is:

1 1. A vaccine comprising, in an amount effective to suppress an autoimmune
2 disorder upon administration to a human, attenuated T-cells.

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1 2. The vaccine of claim 1, wherein the autoimmune disorder is multiple
2 sclerosis.

1 3. The vaccine of claim 2, comprising T-cells cultured in the presence of
2 natural or synthetic myelin proteins.

1 4. The vaccine of claim 3, wherein the vaccine is prepared by selecting and
2 expanding T-cells that respond to myelin proteins.

1 5. The vaccine of claim 1, wherein the T-cells are derived from autologous
2 peripheral mononuclear cells.

1 6. The vaccine of claim 1, wherein the T-cells are attenuated by irradiation.

1 7. The vaccine of claim 5, wherein the cultured, attenuated T-cells are frozen
2 before attenuation.

1 8. A method of mediating an immune response, comprising the step of
2 administering attenuated T-cells to a human.

1 9. The method of claim 8, wherein the T-cells are derived from autologous
2 peripheral mononuclear cells.

1 10. The method of claim 8, wherein the T-cells comprise T-cells cultured in
2 the presence of natural or synthetic myelin proteins.

1 11. The method of claim 10, wherein the T-cells are prepared by selecting and
2 expanding T-cells that respond to myelin proteins.

1 12. The method of claim 8, wherein the attenuated T-cells are attenuated by
2 irradiation.

1 13. The method of claim 8, wherein the T-cells target more than one myelin
2 protein.

1 14. The method of claim 8, wherein the T-cells are administered
2 subcutaneously.

1 15. The method of claim 8, wherein the T-cells are administered in 4 to 6
2 week intervals.

1 16. The method of claim 8, wherein the T-cells are administered for
2 approximately 18 months.

1 17. The method of claim 8, wherein the T-cells are administered in a first
2 dosage of 30×10^6 to 80×10^6 attenuated T-cells.

1 18. The method of claim 17, further comprising more than one administered
2 dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up
3 to the point of adverse reactions.

1 19. The method of claim 17, further comprising more than one administered
2 dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up
3 to the point of clinical response.

1 20. A vaccine comprising, in an amount effective to suppress multiple
2 sclerosis, upon administration to a human, attenuated T-cells, wherein the attenuated T cells are
3 prepared by;

4 culturing autologous peripheral mononuclear cells in the presence of natural or
5 synthetic myelin proteins;

6 selecting and expanding T-cells that respond to the myelin proteins; and

7 attenuating the T-cells by irradiation.